## ABSTRACT OF THE DISCLOSURE

The object of the present invention is to avoid disconnection of a radio link between the radio base station and the mobile station even when the mobile station moves while transmitting no up signals in a case where the radio base station transmits the directional beam. The radio base station according to the present invention comprises an array antenna 11 to transmit/receive the directional beam, an transceiver 12 to receive an up signal from a mobile station 2 and to generate a directional beam pattern for each mobile station according to an antenna weight, a up signal interval measurer 13 to measure elapsed time from reception of the up signal, and a antenna weight generator 15 to change the antenna weight based on a result of measuring by the up signal interval measurer 13.

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